

WE CLAIM:

1. A method for providing and executing a diagnostics module in direct response to a user request, the method comprising:

storing at a client computer a control object operative to retrieve the diagnostics module in response to the user request, to store the diagnostics module at the client computer, to determine whether execution of the diagnostics module is authorized and, in response to determining that execution of the diagnostics module is authorized, to execute the diagnostics module.

2. The method of Claim 1, wherein the diagnostics module comprises computer code executable only in response to commands issued by the control object.

3. The method of Claim 2, wherein determining whether the execution of the diagnostics module is authorized comprises transmitting a request to a diagnostics server computer for authorization to execute the diagnostics module.

4. The method of Claim 3, wherein retrieving the diagnostics module comprises transmitting a request to the diagnostics server computer for authorization to retrieve the diagnostics module, receiving authorization to retrieve the diagnostics module, transmitting a request to the diagnostics server computer for the diagnostics module in response to receiving the authorization to retrieve the diagnostics module and, receiving the diagnostics module from the diagnostics server computer.

5. The method of Claim 4, wherein the control object is further operative to receive from the diagnostics server computer a data file containing data describing how the diagnostics module should be installed on the client computer, and wherein storing the diagnostics module at the client computer comprises installing the diagnostics module at the client computer according to the data contained in the data file.

6. The method of Claim 5, wherein the control object is further operative to determine whether execution of the diagnostics module has completed, and to transmit data to the diagnostics server computer regarding the execution of the diagnostics module in response to the completion of the execution of the diagnostics module.

7. A computer-readable medium having stored thereon computer-executable instructions which, when executed by a computer, cause the computer to perform the method of Claim 1.

8. A computer-controlled apparatus capable of performing the method of Claim 1.

9. A method for providing and executing a diagnostics module in direct response to a user command, the method comprising:

receiving the request from the user to execute the diagnostics module;

in response to the user request, retrieving from a diagnostics server computer a control object operative to manage the installation and execution of the diagnostics module; and

executing the control object, wherein execution of the control object comprises:

retrieving from the diagnostics server computer a configuration file containing data identifying one or more network addresses at the diagnostics server computer for communicating with the diagnostics server computer and a data file containing data describing how the diagnostics module should be installed on the client computer;

requesting, by way of a network address specified by the configuration file, permission to retrieve the diagnostics module from the diagnostics server computer;

in response to receiving permission to retrieve the diagnostics module, retrieving the diagnostics module from the diagnostics server computer at a network address specified by the configuration file;

installing the diagnostics module on the client computer according to data provided in the data file;

requesting, by way of a network address specified by the configuration file, permission to begin the execution of the diagnostics module; and

executing the diagnostics module in response to receiving permission.

10. The method of Claim 9, wherein the execution of the diagnostics module is performed in response to commands issued by the control object and wherein the diagnostics module comprises computer code executable only in response to commands issued by the control object.

11. The method of Claim 10, wherein the diagnostics module comprises executable computer code capable of diagnosis failures of potential failures within a computer upon which it is executed.

12. The method of Claim 11, wherein the control object is further operative to determine whether execution of the diagnostics module has completed, and to transmit data to the diagnostics server computer regarding the completion of the diagnostics module in response to the completion of the execution of the diagnostics module.

13. A computer-readable medium having stored thereon computer-executable instructions which, when executed by a computer, cause the computer to perform the method of Claim 12.

14. A computer-controlled apparatus capable of performing the method of Claim 12.

15. A method for providing and executing a diagnostics module comprising one or more executable files for diagnosing failures or potential failures within a computer, the method comprising:

receiving the selection of the diagnostics module to be executed;

in response to the selection, retrieving from a diagnostics server computer a configuration file containing data identifying one or more network addresses at the diagnostics server computer for communicating with the diagnostics server computer and a data file containing data describing how the one or more files comprising the diagnostics module should be installed on the client computer;

determining, based on the contents of the data file, whether any of the executable files are common to two or more diagnostics modules;

in response to determining that one or more of the executable files are common to two or more diagnostics modules, retrieving the common executable files and installing the common executable files on the client computer;

receiving a request to start the execution of the diagnostics module, and in response thereto, requesting by way of a network address specified by the configuration file, permission to retrieve the diagnostics module from the diagnostics server computer;

in response to receiving permission to retrieve the diagnostics module, retrieving the diagnostics module from the diagnostics server computer at a network address specified by the configuration file;

installing the diagnostics module on the client computer according to data provided in the data file;

requesting, by way of a network address specified by the configuration file, permission to begin the execution of the diagnostics module; and

executing the diagnostics module in response to receiving permission to execute the diagnostics module from the diagnostics server computer.

16. The method of Claim 5, wherein the execution of the diagnostics module is performed in response to commands issued by a control object and wherein the diagnostics module comprises computer code executable only in response to commands issued by the control object.

17. The method of Claim 16, wherein the diagnostics module comprises executable computer code capable of testing for failures or potential failures within the client computer.

18. The method of Claim 17, further comprising determining whether execution of the diagnostics module has completed or canceled, and transmitting data to the diagnostics server computer regarding the completion of the diagnostics module in response to determining that execution of the diagnostics module has completed or been canceled.

19. A computer-readable medium having stored thereon computer-executable instructions which, when executed by a computer, cause the computer to perform the method of Claim 15.

20. A computer-controlled apparatus capable of performing the method of Claim 15.